## **ASX Announcement**

## 21 November 2012



# Cauldron discovers 3rd large high grade uranium channel at Yanrey

### **HIGHLIGHTS**

- Third high grade Uranium Paleo-channel identified at Bennett Well South prospect, within Yanrey Uranium Project (WA)
- 10-20km channel length by 500m wide with potential for 3-4km of high grade Uranium bearing sediments
- All paleo-channels targeted by current drill program have returned high-grade mineralisation
- Consistent high grade 2.5-3m in thickness (up to 2000ppm metre grade thickness)
- Previous Yanrey announcements include peak results of 10,000ppm and new channel at Bennett Well East and 11m thick uranium intersection at Bennett Well South

Australian diversified exploration company Cauldron Energy Limited (**ASX:CXU**) ("Cauldron Energy" or "the Company") confirms that latest drilling at the Bennett Well South prospect, within the Yanrey uranium Project in Western Australia, has identified a third high grade uranium paleo-channel of consistent depth, width and potentially significant length.

"The identification of this new 10-20km long channel by 500m wide, which appears to have 3-4km of the right high grade uranium bearing sediments and is open to the north and the south and widening to the north, is a further significant development at this key Western Australian project," said Cauldron Energy head of operations Simon Youds.

Cauldron Energy has been undertaking drilling at Bennett Well South in recent weeks, having recently completed a highly successful drilling program at Bennett Well East that yielded significant results<sup>1</sup>, including:

- YNMR018 2.7m @ 1021 ppm from 40.6m (peak grade of 2267 ppm);
- YNMR026 1.3m @ 1210 ppm from 40.6m (peak grade of 3706 ppm);
- YNMR022 1.9m @ 777 ppm from 43.4m (peak grade of 2156 ppm);
   and
- YNMR048 3.3m @ 1596ppm from 57.7m, (grade width of 5330ppm), including 2.21m @ 2251 ppm from 57.7m (grade width 4974ppm).

#### **Cauldron Energy Limited**

ABN 22 102 912 783

32 Harrogate Street, West Leederville WA 6007

PO Box 1385, West Leederville WA 6901

ASX code: CXU

159,622,605 ordinary shares 4,300,000 unlisted options

#### **Board of Directors**

Tony Sage Executive Chairman

Brett Smith
Executive Director

Qiu Derong Non-executive Director

Claire Tolcon Company Secretary

Refer ASX announcements dated 29 & 30 October 2012 for full details of this drilling program

# **ASX Announcement**



On 9 November 2012, Cauldron Energy announced that the first two holes drilled at Bennett Well South (holes YNMR061 and YNMR062) intersected 11m wide zones of  $eU_3O_8$  mineralisation from 91.0m and 85.6m respectively; at a chemical (redox) interface beneficial for high-grade uranium mineralisation.

These latest results from drilling at Bennett Well South have established the presence of a wide paleo-channel, with a thick zone of anomalous uranium mineralisation, exhibiting high grades, over a consistent 2.5-3.0m vertical thickness in the drill holes as follows:

- YNMR071 2.8m @ 319ppm from 82.2m Grade-width 893 ppm.m;
- YNMR074 2.5m @ 481ppm from 92.1m Grade-width 1178 ppm.m; and
- YNMR076 3.0m @ 384ppm from 86.3m Grade-width 1152 ppm.m.

"The extent of the uranium mineralisation extrapolated from these drill holes point to a uranium mineralisation envelope containing more uranium than initially established to be at Bennett Well and more recently outlined at Bennett Well East," Youds added.

"The dimensions of the channel could extend as far as 10km-20km in a north-south direction and excitingly the potential for further extensions of high grade uranium mineralisation with at least 3-4km of suitable sediments now believed to have the correct redox environment is a strong possibility given the drilling success at the Bennett Well prospects in the current drill program."

The original exploration target size  $^2$  (25-30Mlb  $U_3O_8$ ) for the Yanrey region, encompassing the Bennett Well prospects among others, was based on numerous east to west paleo channels known to exist on the extensive Cauldron land holding in the area. These channels were expected to have a redox front with a precipitation of uranium leading to an economic concentration at this point.

The two Bennett Well channels (Bennett Well South and Bennett Well East) were found to contain high grade uranium mineralisation with a north-south orientation.

This significantly improves the potential for redox fronts along the full length of the interpreted paleo coastline and improves the potential for a significant upgrade of the exploration target size.

#### **Previous Drilling**

Recent drilling (refer to ASX Announcement dated 29 October 2012) identified a high grade paleo-channel approximately 1.6km long by 120m wide and open to both the north and south at the Yanrey Project.

Of the 15 holes drilled and analysed, 11 have intersected the high-grade channel with peak preliminary results of 3706 ppm  $eU_3O_8$  (1.3m @ 1,210 ppm  $eU_3O_8$  from 40.6m) and 2156 ppm  $eU_3O_8$  (1.9m @ 777 ppm  $eU_3O_8$  from 43.4m).

Please refer to the previous ASX announcement dated 29 October Bennet2012, for further information regarding the area, the drill program and background of the project.

Exploration Target: Under clause 18 of the JORC code the exploration targets (excluding the portion already classified into JORC inferred resource) outlined in this announcement are conceptual in nature as there has been insufficient exploration (namely drilling) to define a mineral resource and it is uncertain if further exploration will result in the determination of any additional mineral resources.

## **ASX Announcement**



#### **On-going Exploration**

The Company is encouraged by these exploration results and has high expectations for the Bennett Well resource extensions and new channels proposed for testing. Accordingly, the Company has extended its program by 1,500 metres.

#### End.

For further information, visit www.cauldronenergy.com.au or contact:

**Simon Youds** 

Cauldron Energy Limited

Ph: (08) 9380 9555

**David Tasker/ Colin Jacoby** 

**Professional Public Relations** 

Ph: (08) 9388 0944

#### **Disclosure Statements**

#### **Analytical Method**

All holes were gamma logged by Borehole Wireline P/L with an Geovista 38mm total count gamma tool. The gamma tool was calibrated in Adelaide at the Department of Water, Land and Biodiversity Conservation in calibration pits constructed under the supervision of CSIRO. The gamma tool measures the total gamma ray flux in the drill hole. Readings are averaged over 5 centimetre intervals and the reading and depth recorded on a portable computer. The gamma ray readings are converted to equivalent  $U_3O_8$  readings by using the calibration factors derived in the Adelaide calibration pits. These factors also take into account differences in hole size and water content.

The results presented in this announcement are field readings and have yet to be validated by experts for grade/thickness intervals. Preliminary results have been provided by a qualified technician operating a wireline gamma logging tool and are expected to be within 5% - 10% of the final results. Errors may occur and these results should only be used as an indicator of possible mineralisation.

The gamma radiation used to calculate the equivalent  $U_3O_8$  is predominately from the daughter products in the uranium decay chain. When a deposit is in equilibrium, the measurement of the gamma radiation from the daughter products is representative of the uranium present. It takes approximately 2.4M years for the uranium decay series to reach equilibrium. Thus, it is possible that these daughter products, such as radium, may have moved away from the uranium or not yet have achieved equilibrium if the deposit is younger than 2.4M years. In these cases the measured gamma radiation will over or under estimate the amount of uranium present. Sandstone hosted roll front mineralisation may not be in equilibrium due to one of the above factors. Grade width is calculated from the average  $eU_3O_8$  ppm grade multiplied by the metre measurement of the true width of the zone as measured in the vertical borehole. The units of Grade Width are parts per million metres (ppm.m)

#### **Competent Person Statement**

The information in this announcement to which this statement is attached that relates to Cauldron Energy Limited's exploration results is based on information compiled by Mr Brett Smith who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Smith is a full time employee of Cauldron Energy Limited and has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration. Mr Smith is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Smith consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.